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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/057,632

01/25/2002

Ronald M. Burch

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EXAMINER

GROSS, CHRISTOPHER M

ART UNIT

PAPER NUMBER

1639

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DELIVERY MODE

10/26/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/057,632	<b>Applicant(s)</b> BURCH ET AL.	
	<b>Examiner</b> CHRISTOPHER M. GROSS	<b>Art Unit</b> 1639	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38 and 47-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38 and 47-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/5/2010;4/22/2010</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Responsive to communications entered 3/24/2010. Claims 38 and 47-73 are pending. Claims 38 and 47-73 are under consideration.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/24/2010 has been entered.

### ***Priority***

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 or 119 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the prior application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Prods., Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994) [taken from MPEP 201.01]

The instant application, 10/057,632 filed 1/25/2002 claims priority as a CON of application 09/154,354 filed 09/17/1998 (now PAT 6,552,031; referred to as '354) which claims benefit of provisional application 60/059,195 (referred to as "the provisional") filed 09/17/1997.

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However, the following limitations are not disclosed in the earlier applications.

1. Any ratio T-614 to oxycodone, set forth throughout the claims.
2. the COX-2 inhibitor (i.e. N-[3-(formylamino)-4-oxo-6-phenoxy-4H-1-benzopyran-7-yl]; a.k.a. T-614) in a *single* dosage form, as set forth in amended claim 38 line 4.

Therefore 1/25/2002 is the date for the purposes of prior art concerning claims 38,47-73.

If applicant believes this assessment is in error, applicant is to indicate as to page and line where support for each of the above limitations may be found in the earlier applications.

See also 35 USC 112 first paragraph rejection below concerning "new matter."

#### Discussion

Please note, applicant's amendments and arguments have largely addressed the priority concerns, especially with regard to oxycodone as preferred, raised in the last office action, nevertheless the claims as presently amended introduce new limitations which are not disclosed in the earlier applications as follows.

Page 7 third paragraph and p 10 third full paragraph of the 3/24/2010 remarks asserts that support for any ratio of T-614 to oxycodone, such as set forth in the claims may be found in table I of '354 as well as claim 20 of the provisional. It is noted, however that table I of '354 recites oxycodone to T-614 in a ratio ranging from 0.0001-1 and similarly claim 20 of the provisional refers to oxycodone to T-614 ratios in table I on p 12 therein (i.e. 0.002-48). None of the pending claims recite said either range.

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With regard to T-614 in a single dosage form, as set forth in amended claim 38, the paragraph bridging pp 7-8 of the remarks point to p 7 lines 21- p 8 line 5 of the provisional. Here it is noted that this passage, in context, refers to a single dosage form of a COX-2 inhibitor together with an opioid analgesic (e.g. oxycodone) rather than a COX-2 inhibitor in a single dosage form (alone).

***Maintained Claim Rejection(s) –***

***35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 38, 47-52 plus 53-65 as well as 66-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Baker et al** (US 4569937; of record) and **Tanaka et al** (1992 Arzenimittel-Forschung 42:935-944; of record) and further in view of **Oshlack et al** US Pat. No. 5,472,712 (12/95; referred to below as '712; of record) or **Oshlack et al** US Pat. No. 6,294,195 (9/01: effectively filed 10/93 or earlier; referred to below as Oshlack '195; of record) for the reasons set forth in the office action mailed 1/19/2005 and/or 11/24/2009.

With regard to applicant's amendments to claims 38, 49 and 64 concerning the COX-2 inhibitor T-614 combined with a carrier materials in a single dose form, in section

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2.1, Tanaka et al teach T-614 was suspended in 0.5% carboxymethylcellulose (a sustained release carrier) and given orally. Please note as mentioned in paragraph 0070 of the present published application, water is defined as a type of carrier.

With regard to amended claims 47 and 63, Takana et al teach in figure 6, for instance, dosages as low as 0.96 per kg body mass as effective for alleviating pain, thus for a 26 kg ( $26 \times 0.96 = 25$ ) human child, Takana et al inherently teach 25 mg T-614, as set forth claims 47, 63 and 68 and is in the range of claim 51. Similarly for a 52 kg ( $52 \times 0.96 = 50$ ) human woman, Takana inherently teach 50 mg T-614, as set forth in claims 50 and 65 and 69.

Oshlack '195 in column 6 line 50 teach 5-400 mg oxycodone dosages, overlapping the range of amended claims 52 and 54. In column 4 lines 14, Oshlack '195 suggest 12 hour (two times per day) dosing as set forth in amended claim 54.

Oshlack '195 teaches ethylcellulose (an alkylcellulose; elected species) in column 5 line 17 and '712 teaches ethylcellulose (an alkylcellulose; elected species) in column 3 line 60, reading on claim 55.

Oshlack '195 teaches in column 7 lines 20-26 a non-opioid drug may be coated on a tablet in immediate or sustained release release form and opioid in sustained release matrix, reading on claims 59-60.

Oshlack '195 teaches in column 9 lines 48-58 varying the amount of plasticizers and hydrophobic polymer carriers (i.e. various admixtures of excipients) reading on claim 62 as amended.

Oshlack '195 teach solid dosage forms such as tablets in column 1 line 39, at least, reading on claims 66,67,70,71,72,73.

*Response to Arguments*

The 3/24/2010 remarks assert: (A) not all elements are taught; (B) the evidence provided by Beaver mentioned in the last office action is not applicable; (C) The examiner's reliance on *in re Aller* and *in re Kerkoven* is inappropriate.

Applicant's arguments have been fully considered but they are not deemed persuasive for the following reasons.

(A) First p 13 of the remarks contends that figure 4 of Tanaka et al concerns the antiinflammatory properties of T-614 in rats rather than analgesia in humans. With regard to analgesia, applicant's attention is respectfully invited to the abstract, section 4.2.3-6 and figure 6-9, where Tanaka et al. investigate pain using Randall-Sellito's method, Adjuvant-induced hyperalgesia, antigen-induced arthritic pain, explicitly measuring the effectiveness of T-614 against arthritic pain as well as urate-induced knee-joint pain in dogs (a model for degenerative joint diseases), as set forth in claims 38, 56 and 62).

With regard to humans, it is noted that T-614 was never intended to constitute only a veterinary analgesic, but rather represents a promising COX-2 specific inhibitor for use in humans suffering from earlier Non-Steroidal Antiinflammatory Drug (NSAID) side effects such as gastrointestinal intolerance, as discussed by Tanaka et al. in the introduction. Furthermore, solely to rebut applicant's argument, evidence provided by

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Griswold et al. (1996 Medicinal Research Reviews 16:181-206) on p 201 third full paragraph indicates that the animal models, such disclosed by Tanaka et al. and others, have proven so successful that T-416 had entered clinical trials in Japan as of at least 1996. Therefore the skilled artisan, even before the current invention was made, would recognize T-614 is directed toward use in humans.

The first full paragraph on p 15 of the remarks assert that Tankana et al. do not teach solid dosage forms such as tablets. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Here, solid dosage forms are taught by each of the Oshlack et al. references (as well as Baker et al.).

(B) The paragraph bridging pp 13-14 of the remarks assert that the Beaver references which showed evidence (in the last office action) that opioids -including oxycodone - plus NSAIDs provide superior analgesia by enhancing efficacy by administering two drugs that produce the same effect by different mechanisms ("cross-firing") is an old idea in the art and is irrelevant because Beaver indicates that combinations should only be used *if* a single drug does not provide adequate analgesia.

In this vein it is noted that the features upon which applicant relies (i.e., failure of a single drug to provide pain relief) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are



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not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(A,C) Second on p 14 fourth paragraph, the remarks argue that discerning of 25 or 50 mg T-614 is not possible by the disclosure of Tanaka et al. The examiner respectfully disagrees. As mentioned above, giving the claims the broadest reasonable interpretation, 25 mg may be calculated as an effective dose for a 26 kg child and 50 mg may be calculated as an effective dose for a 52 kg woman, based 0.96 mg per kg body mass dose disclosed by Tanaka et al in figure 6. Despite applicant's not showing criticality, commensurate with MPEP 2144.05 II, of the amount of T-614, such as set forth claim 51 or even narrower claims 47,63,68,69 said calculations are based upon the disclosure of Tanaka et al and does not rely upon *in re Aller*.

(C) The paragraph bridging pp 14-15 assert that the examiner's reliance upon *in re Kerkhoven* is inappropriate because, unlike the case, the present claims are not drawn to spray dried detergents.

In this vein, applicant's argument is immaterial because the logic set forth in MPEP 2144.06 citing *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) that it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art is still sound regardless of the fact that the present claimed subject matter is drawn to analgesics rather than sprays. In other words, the court did not hold, in the field of spray drying,

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combining two compositions for the same purpose is obvious. Furthermore, in a case more in line with pharmaceutical preparations, *In re Diamond and Kellman* 149 USPQ 562,565 (CCPA 1966), the court indicated we think it is clear that it is standard practice in this art to combine ingredients to form drug combinations of two compounds for the same use. Thus, the presently claimed method administering T-614 and oxycodone, two compositions, each of which is taught by the prior art to be useful for the same purpose (analgesia) in order to for a third composition to be used for analgesia is *prima facie* obvious. Finally, in accordance with MPEP 2141 section III and *KSR International Co. v. Teleflex Inc. (KSR)*, 550 U.S. 398, 82 USPQ2d 1385,1395 (2007), combining prior art elements according to known methods to yield predictable results is obvious. Since both T-614 and oxycodone each provide pain relief, the skilled artisan would expect the combination would similarly afford analgesia.

### ***Claim Rejection(s) – 35 USC § 112***

The following is a quotation of the **first** paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 38,47-73 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection concerns "new matter"

Independent claims 38, 53 and 63 are each drawn to methods of treating pain with T-614 and oxycodone administered in any ratio.

Page 7 third paragraph and p 10 third full paragraph of the 3/24/2010 remarks asserts that support for any ratio of T-614 to oxycodone, such as set forth in the claims may be found in table I of the original specification and '354. It is noted, however that table I of the original specification and '354 each recite oxycodone to T-614 in a ratio ranging from 0.0001-1. None of the pending claims include said range.

Claim 38 is drawn to a method of treating pain comprising administering T-614 as a single dosage by itself.

With regard to T-614 in a single dosage form, the paragraph bridging pp 7-8 of the remarks point to p 18 lines 21-24 and p 11 lines 4-6 of the original specification. Here it is noted that the passages from the original specification refers to a single dosage form of COX-2 inhibitor and opioid analgesic (e.g. oxycodone) rather than a COX-2 inhibitor in a single dosage form alone, as set forth in claim 38.

Applicants are reminded that it is their burden to show where the specification supports any amendments to the disclosure. See MPEP 714.02, paragraph 5, last sentence and also MPEP 2163.06 I.

MPEP 2163.06 notes "If new matter is added to the claims, the examiner should reject the claims under 35 U.S.C. 112, first paragraph - written description requirement. *In re Rasmussen*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981)." MPEP 2163.02 teaches that "Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time

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the application was filed...If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application. MPEP 2163.06 further notes "When an amendment is filed in reply to an objection or rejection based on 35 U.S.C. 112, first paragraph, a study of the entire application is often necessary to determine whether or not "new matter" is involved. *Applicant should therefore specifically point out the support for any amendments made to the disclosure.*

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Please note that the above rejection has been modified from the original version to more clearly address applicants' newly amended and/or added claims and/or arguments.

This is a RCE of applicant's earlier Application No. 10/057,632. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER M. GROSS whose telephone number is (571)272-4446. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571 272 0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amber D. Steele/  
Primary Examiner, Art Unit 1639

Christopher M Gross  
Examiner  
Art Unit 1639

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